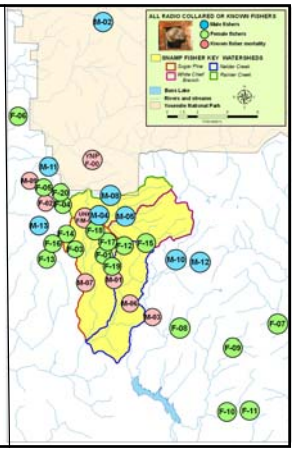
Approximate centers of fisher home ranges documented to date

27 fisher are currently "on the air"

Expect to have a total of at least 40 fisher tracked until death over the next seven years



SNAMP Science Team: Wildlife – Spotted Owl

Owl Team Members

Principal Investigator:
- Rocky Gutiérrez

Project Leader:
- Douglas Tempel

Assistant Project Leader (SNAMP):
- Sheila Whitmore

Assistant Project Leader (Eldorado):
- Vince Berigan

Owl Team Goals
- The Owl Team will be monitoring the California Spotted Owl (*Strix occidentalis*) through the life of the SNAMP project in the northern site.
- *Do forest fuel treatments have an effect on spotted owl territory occupancy and reproductive success?*

Owl Team Activities
- Owl Surveys
- Pre-treatment vegetation sampling

University of Minnesota, Dept. of Fisheries, Wildlife & Conservation Biology

Owl Team Research Objectives

•To assess the potential effects of forest fuel treatments on spotted owl territory occupancy and reproductive success.

–Develop quasi-experimental design to evaluate relationship with the response variables.

–Consider relevant explanatory variables (e.g. amount of pre-existing habitat within an owl territory).

–Estimate the effect size of explanatory variables.

Owl Team Data Collection

•Monitor history of occupancy on each owl territory during the course of the SNAMP study.

•Individual owl capture-recapture histories.

•Habitat data for each owl territory, including pre-treatment data for territories that overlap planned fuel treatments.

Summary of Completed Fieldwork

•Completed 2 seasons of owl surveys (2007, 2008) on Last Chance Owl Study Area. 24 color-marked owls.

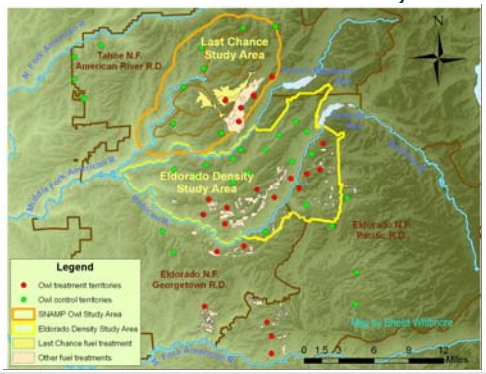
•Continued owl surveys on Eldorado Owl Study Area (1986—present). 89 color-marked owls in 2007, 2008.

•Seven SPLATs planned on the two owl study areas for 2008-2010 (including Last Chance project).

•Completed pre-treatment vegetation sampling in summer 2008 within six SPLAT sites on both owl study areas.

•Tentative sample size of 22 treatment and 32 control owl territories.

Planned SPLATs on Owl Study Areas

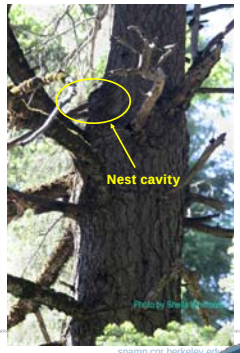


Survey Results (Last Chance)

	2007		2008	
Territory	**Occupancy**	**# Fledglings**	**Occupancy**	**# Fledglings**
Canada Hill	Female	0	Female	0
Deadwood North	Unknown	-	Male	0
Deadwood West	Unknown	-	Pair	0
Last Chance Mine	Pair	0	Pair	2
Oak Flat	Pair	2	Pair	1
Sailor Flat	Pair	2	Pair	0
Screwauger Canyon	Pair	2	Pair	0
Secret Canyon	Pair	0	Pair	1
Greek Store (*treatment*)	Pair	0	Pair	0
Glenn Mine (*treatment*)	Pair	1	Pair	0
Dixie Queen Mine (*treatment*)	Pair	0	Pair	0
Hard Climb Mine (*treatment*)	Pair	0	Pair	2

2008 Nest Tree (Oak Flat)

2008 Nest Tree (Last Chance Mine)

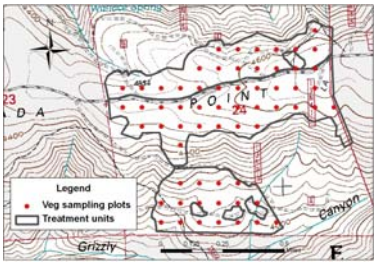


Habitat Data Collection

- Important variables for describing habitat "quality" of owl territories:
  - –Dominant tree size/basal area
  - –Canopy cover
  - –Understory layer
  - –Downed logs
  - –Proportion of territory in suitable habitat
- "Before and after" measurements needed to quantify fuel treatment effects on owl habitat.
- Standard method needed to map habitat within owl territories:
  - –Cannot use LiDAR because owl study areas extend far beyond area of LiDAR data collection.
  - –Currently plan to use maps derived from aerial photos.
  - –Cross-walk our vegetation measurements with FFEH Team measurements and LiDAR data.

Vegetation Plots for Quantifying Effects of Fuel Treatments

- Plots spaced 125 meters apart (1 plot per 5 acres).
- Pre- and post-treatment vegetation data will be collected at same plot locations.
- Variables measured:
  - Tree density
  - Tree size
  - Tree species
  - Tree condition (live/dead)
  - Canopy cover
  - Shrub/understory cover
  - Downed logs
  - Slope, aspect



Please join us in our breakout session.

For more information: http://snamp.cnr.berkeley.edu